Typical Construction Costs
May 23, 2012

Costs can vary considerably depending on pavement thickness, soil conditions, utility conflicts, storm sewer requirements, land use, terrain, moving dirt or having to blast through rock.

1) MDOT US-41 near Baraga- $2.9 million for 1.5 miles of road ($1.93 million per mile), included $260,00 for ROW costs, $243,00 for engineering
    - Road was offset 0-100 feet
    - 5.5 inches of asphalt- 3 layers
    - Flat terrain
    - 1 cross culvert
    - Included re-building a railroad intersection

2) MDOT UP- average cost to reconstruct bituminous paving is $956,000 per lane mile (or $1.9 million per mile for a 2 lane road)

3) Marquette County- estimated cost to upgrade 0.66 miles of Triple A road is $1.0 million (or $1.5 million per mile for a 2 lane road. Includes preliminary engineering and construction engineering costs. Existing road will be reconstructed and upgraded to all season standards. Costs include drainage improvements and horizontal and vertical alignment improvements.

4) Marquette County estimated cost to upgrade 0.87 miles of County Road 601 is $1.8 million (or $ 2.1 million per mile). Existing narrow road will be reconstructed/widened to a two-lane all season standard road. Costs included flattening a steep hill, re-aligning 2 sharp curves, and maintaining 2-way traffic during construction

5) City of Marquette- McClelland Avenue- $1.8 million for 0.48 miles of 2 lane road ($3.8 million per mile)
    - Flat terrain, ½ upland, ½ wetland, wetland excavation for road fill
    - Include curbing and gutter and storm sewer costs, sidewalk, 2 traffic signals, heavy rock in road base, thick pavement for trucking, retaining wall to minimize wetland impacts
    - Does not Include $100,000 for 2.5 acres of wetland mitigation
    - Includes cost for stream restoration
    - Does not include design costs

**Other County Projects in Lower Peninsula**- asphalt not as thick typically 3-4 inches

6) Ingham County- $400,000-$600,000 per lane mile for reconstruction (or $800,000-$1.2 million for a 2 lane road).
    - Design fees 7-12% of construction costs
    - Construction engineering 8-13% of construction
    - ROW cost varies widely- $0.35 a sft for rural areas up to $22 a sft in some urban settings

7) Allegan County- $200,000 per mile on gravel roads with decent soils, minimal dirt movement, add $140,000 per mile to add 3 inches of asphalt. ($340,000 per mile)
    - Design fees $8000 for a consultant
    - ROW 0-$5,000

- Estimating about $1,000,000 for a new 1 mile section of paved all seasons road next year with $20,000 for design engineering and $50,000 for ROW.

8) Wexford County- (Generally about $500,000 per mile) for a standard new county road with decent soils, nothing special- not including engineering or ROW.
    - $300,000-$400,000 per mile to reconstruct a standard generic road not hills or big cuts, no undercuts or swamp work
    - $900,000 per mile estimate for a current urban reconstruct job out for bid with a bridge and cul-de-sac
    - $3 million per mile to reconstruct road in downtown Cadillac
    - $6 million per mile to build US 131 freeway around Manton not including bridges

9) Eaton County- ($2.6 million bid for new 1 mile section of road), part 3 lane, part 2 lane, some turn lanes and side walks
    - Minimal fill some cut, no culverts or bridges, 6 inches of asphalt
    - Does not include ROW costs- they already owned
    - Includes $800,000 for sound wall
    - Does not include10% extra for design
    - Does not include 10-15% extra for construction oversight

10) Finkbeiner Road- Barry County rural area- 2 distinct phases (costs include construction, ROW, engineering, construction engineering, did not include staff time or attorney fees)
    a. $5.3 million or ($1.5 million per mile) -3.48 miles of 2 lane rural road reconstruction and upgrade/widening, included 0.37 miles of upgrade of flat two track road section and one large section of wetland fill. About 1 acre of wetland impact.
    b. $5.5 million or ($7.0 million per mile)- 0.79 miles of 2 lane road includes 0.47 of new road with about 20 feet of fill, 250 feet 2 span bridge and a 145 foot single span bridge.. About 0.5 acres of wetland impact

11) **Federal Highway Administration-** cost based on 2003 report adjusted for 2006 dollar, differences in factors include terrain type, rural versus Urban, high cost versus low cost state, concrete versus asphalt, pavement thickness, new construction versus adding new lanes. Costs include bridges, interchanges, and environmental issues for a normal project.
    a. Adding a single lane to an existing highway in rural areas- $1.6 million to $3.1 million per lane mile ($3.2 million to $6.2 million per mile for a 2 lane section).
    b. New construction- the cost to construct one lane mile of a typical 4 lane divided highway in a rural area is $3.1 million - $9.1 million per lane mile ($6.2 million to $18.2 million per mile for a 2 lane section).